Department of Ecology looking out for river

By Joye Redfield-Wilder
Washington Department of Ecology

The year began with the appointment of Jane Hedges as the manager of the Washington Department of Ecology's Nuclear Waste Program, the state program charged with overseeing the federal cleanup at the Hanford Nuclear Reservation.

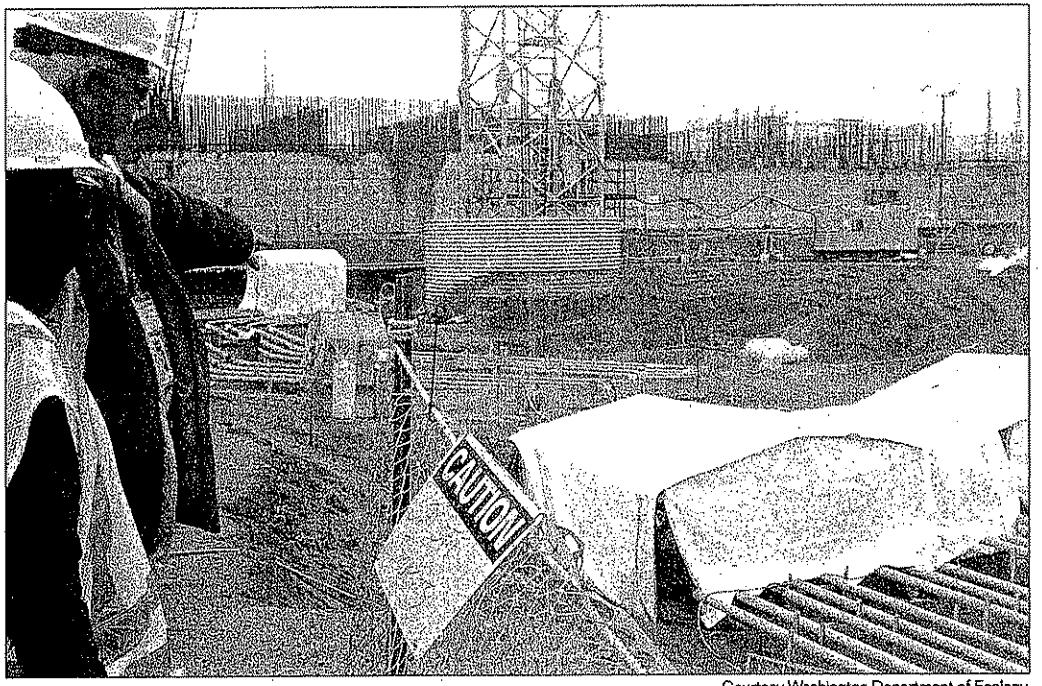
Hedges manages a staff of 68 employees, headquartered in Richland, that includes engineers, hydrogeologists, chemists and other technicians who provide oversight and technical support regarding the complex issues surrounding cleanup at Hanford. Hedges has been with the Nuclear Waste Program since 1999 was the cleanup section manager before accepting her new position as program manager.

Hedges

"Mixed radioactive and hazardous waste contamination at Hanford is not a legacy we want to pass on to future citizens of the state of Washington," Hedges said. "That is why we're thoroughly committed to getting this site cleaned up. At the same time, we want cleanup to be done right."

Left in place, waste eventually would leak into the soil, migrate to ground water and enter the river. Cleaning up the waste becomes much harder as it makes each step in this journey. That's why it is so important to remove the waste from the tanks before leaks occur.

"Protecting the Columbia River is job one for us," Hedges said. "That means we need to remove the source for one of the greatest threats to the river, the nuclear waste that is stored in aging, leak-prone tanks located on Hanford's Central Plateau."



Courtesy Washington Department of Ecology

Jerry Hensley and Tanya Williams of the Department of Ecology observe welders working on pipes that will transport waste from the Pretreatment Facility to the High Level Waste Facility (background), the Low Activity Waste Facility and the sampling lab at the Waste Treatment Plant.

About 53 million gallons of waste remain in 146 single-shell and 28 double-shell tanks. That's equivalent to 2,650 backyard swimming pools, or about a million drums of waste.

Hedges said getting the Hanford Waste Treatment Plant up and running is the key component in reversing the threats posed at Hanford. She said the treatment plant is the right facility with the right technology at the right time.

"Time is running out on the temporary storage tanks," Hedges said. "Ecology, Gov. Gregoire and Attorney General McKenna are united in our opposition to federal funding cuts, which will slow down construction of the plant."

Waste from the tanks will be immobilized in glass at the plant and prepared for underground disposal. The most radioactive vitrified waste is scheduled to be sent to the Yucca Mountain Deep Geological Repository in Nevada and the less radioactive waste will be buried at the Integrated Disposal Facility on the Hanford site.

"As long as this waste is not contained, we're flirting with more contamination to the soil and ground water, and eventually the river," Hedges said. "Delays compound the threat."

The state, its congressional delegation and the citizens of the Tri-City region are committed to ensuring that the federal government completes the facility as quickly as possible and begin treating the waste.

In the meantime, progress is being made to reduce the threat of tank leaks until the waste treatment plant is ready to begin vitrification. Last year, waste from three single-shell tanks, the oldest and least protective type of tank, was successfully transferred to more protective double-shell tanks.

"We're proud of that accomplishment," Hedges said. "Ecology worked very closely with the Department of Energy, providing regulatory support and ensuring that the process was done as safely and as completely as possible."

Transfers to double-shell tanks will continue over the next few years until they are filled to capacity. The waste is destined to be vitrified at the Waste Treatment Plant, once the construction of that facility is completed.

Hedges is encouraged by the progress that is being made. In addition to the work under way to address tank waste, work continues to move forward along the river corridor, moving contaminated soils and burial ground waste into a safe engineered landfill on Hanford.

Another reactor was placed into interim safe storage this year, bringing the total to five.

An initial evaluation of every waste site in the 200 Area, more than 1,000 sites in all, also was conducted last year. Of those sites, 389 were identified as candidates for immediate soil removal, allowing cleanup crews to begin work sooner than expected.

"The long-awaited plan for cleaning up Hanford is finally taking shape," Hedges said. "We're beginning to empty tanks, soil removal has been under way, and the Waste Treatment Plant, the cleanup's cornerstone, is under construction; it's exciting to see it all come together."